

Application Serial No. 10/595,684  
Amendment dated March 29, 2010  
Reply to Final Action dated September 29, 2009

## AMENDED CLAIMS

Claims 1 through 21. (canceled)

Claim 22 (currently amended): A procedure for increasing nutrient-bio-availability of vital substances in a human or an animal, ~~wherein said procedure includes including the administration steps of a nutritiously active quantity of:~~

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providing a granulate comprising:

a somatotropin human growth hormone embedded in a galactomannan and/or a glucomannan;

at least one nutritional additive and a quantity of galactomannan and/or glucomannan that increases the nutrient bio-availability, characterized by that selected from the group consisting of herbal extracts, water-soluble ~~or~~ vitamins, fat-soluble active substances vitamins, amino acids, fatty acids, minerals, and hormones; and

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at least one antioxidant selected from the group consisting of mixed carotenoids, co-enzyme Q10, lycopenes, lutein, zeaxanthin, bioflavonoids, germanium, selenium, zinc, vitamin A, vitamin C, vitamin E, alpha-Lipoic, grape sperm phytosome, extract from green tea and extract from pine bark, wherein the nutritional additive and the antioxidant are embedded in a botanical matrix of a polysaccharide, individually or as a complex separately and always separated from each other in their function, such that the said somatotropin, the nutritional additive and the antioxidant in a the granulate do not interact with one another; and

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administering the granulate to a human or to an animal such that the granulate swells when taken and the embedded active substances are in a digest system of a human or an animal slowly released releasing a nutritiously active quantity of said somatotropin, the nutritional additive and the antioxidant for resorption absorption by the human or animal digestive system.

Claim 23 (withdrawn): The procedure according to claim 22, characterized by that somatotropin

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human growth hormone is embedded in galactomannan and/or glucomannan.

Claim 24 (withdrawn): The procedure according to claim 22, characterized by that the mentioned nutritional additive comprises at least one material that is selected from a group that consists of herbal extracts, water-soluble vitamins, fat-soluble vitamins, amino acids, fatty acids, minerals, antioxidants, and hormones.

Claims 25-27 (canceled)

Claim 28. (withdrawn): The procedure according to claim 24, characterized by that the mentioned antioxidants are selected from a group that consists of mixed carotenoids, co-enzyme Q10, lycopenes, lutein, zeaxanthin, bioflavonoids, germanium, selenium, zinc, vitamin A, vitamin C, und vitamin E, alpha-Lipoic, grape sperm phytosome, extract from green tea and extract from pine bark.

Claims 29-30. (canceled)

Claim 31. (withdrawn) Application of polysaccharides, such as galactomannans, glucomannans, and of a similar kind, for the infiltration of active substances according to claim 22, characterized by that the vital substances are embedded in a botanical matrix individually or as a complex separately and always separated from each other in their function.

Claim 32. (withdrawn) Application according to claim 31, characterized by that the vital substances are vitamins, minerals, trace elements, plant content substances, amino acids, coenzymes, and other metabolically active substances.

Claim 33. (withdrawn) Application according to claim 31, characterized by that the active substance is dissolved in water or, in the case of fat-soluble active substance, is suspended in water, the solution or suspension is slowly added to and mixed with the purified polysaccharide, the emerging gel is dried by an economizing procedure, the clog that forms from the drying

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fragments and is filtered for the desired grain size (preferably 0.2 – 2 mm).

Claim 34. (withdrawn) Polysaccharide according to claim 31, characterized by that a granulate contains a multitude of granulate particles, whereby in a first granulate particle a first active substance and in a second granulate particle a second active substance is embedded.

Claim 35. (withdrawn) Polysaccharide according to claim 34, characterized by that the granulate particle are separated in function and do not interact with each other in an undesired way.

Claim 36. (withdrawn) Polysaccharide according to claim 31, characterized by that the granulate particle contains a multitude of grid or grate shaped polysaccharide molecules, which form a lattice pattern, whereby in the interstices of the lattice pattern the ions of the active substance are bonded through a coordinate bond in the lattice pattern of the polysaccharide molecules.

Claim 37. (withdrawn) Polysaccharide according to claim 31, characterized by that polysaccharide molecules contain a surrounding H<sub>2</sub>O surface film, that completely encloses and shields the thread-like structure.

Claim 38. (withdrawn) Polysaccharide according to claim 31, characterized by that the thread-like polysaccharide molecules OH groups and that ions of the active substance in the interstice between the molecules are bonded by a coordinate bond.

Claim 39. (withdrawn) Polysaccharide according to claim 31, characterized by that because of the penetration of water or intestinal fluids in the interstices of the molecules these move two dimensionally opposite to each other.

Claim 40. (withdrawn) Polysaccharide according to claim 31, characterized by that the active substance exhibits a delayed release, whereby the single threads are in layers removed by

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the penetrating water or the intestinal fluids, whereby the grating structure is removed in layers, and releases the active substance ions that are adsorbed in the interstices.

Claim 41. (withdrawn) Polysaccharide according to claim 31, characterized by that the thread-like molecules are surrounded by a hydrate coat.

Claim 42. (withdrawn) The procedure of claim 22, wherein said granulate comprises a first active substance and a second active substance, and said first active substance and said second active substance are separated from each other.

Claim 43. (withdrawn) The procedure of claim 42, wherein said first active substance is an antioxidant.

| Claim 44. (currently amended) The procedure of claim 42, wherein said antioxidant is co-enzyme Q10.